

Set	Items	Description
S1	1005910	DEFINE? OR DEMARC? OR DESCRIBE? OR CALCULAT?
S2	627583	BORDER? OR ENDPOINT? OR LIMIT? OR BOUNDAR? OR END()POINT?
S3	3227270	POPULATION? OR SET? OR SAMPLE? OR GROUP?
S4	108632	RANDOM? OR PSEUDORANDOM?
S5	21183	STATISTIC? OR SAS
S6	330	S1 AND S2 AND S3 AND S4
S7	33	S5 AND S6
S8	33	IDPAT (sorted in duplicate/non-duplicate order)
S9	33	IDPAT (primary/non-duplicate records only)

File 347:JAPIO Nov 1976-2003/Dec(Updated 040402)

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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200429

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9/5/21 (Item 21 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010231577 \*\*Image available\*\*  
WPI Acc No: 1995-132834/199518  
XRPX Acc No: N95-104517

**Medical diagnosis assistance appts - discriminates attribution degrees  
for determining multiple disease groups by attributing test data of  
patient through multiple group discriminant analysis**

Patent Assignee: TOA MEDICAL ELECTRONICS CO LTD (TOAM-N); SYSMEX CORP  
(SYSM-N); TOA IYO DENSHI KK (TOAI-N)

Inventor: KANAI K

Number of Countries: 009 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 646881	A2	19950405	EP 94402172	A	19940929	199518 B
JP 7105166	A	19950421	JP 93245618	A	19930930	199525
EP 646881	A3	19960306	EP 94402172	A	19940929	199624
TW 290663	A	19961111	TW 94107933	A	19940830	199711
US 5619990	A	19970415	US 94314008	A	19940928	199721
CN 1121207	A	19960424	CN 94117002	A	19940930	199745
KR 328119	B	20020622	KR 9424399	A	19940928	200281
EP 646881	B1	20030702	EP 94402172	A	19940929	200345
DE 69432885	E	20030807	DE 632885	A	19940929	200359
			EP 94402172	A	19940929	

Priority Applications (No Type Date): JP 93245618 A 19930930

Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 354716; GB 2234589; SU 1238105; US  
4844086; US 5083571; WO 9008325

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 646881	A2	E	22	G06F-017/00	
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Designated States (Regional): DE FR GB IT

JP 7105166	A	11	G06F-015/18	
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EP 646881	A3		G06F-017/00	
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TW 290663	A		G06F-015/42	
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US 5619990	A	19	A61B-005/00	
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CN 1121207	A		G06F-007/08	
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KR 328119	B		G06F-015/18	Previous Publ. patent KR 95009256
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EP 646881	B1	E	G06F-017/00	
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Designated States (Regional): DE FR GB IT

DE 69432885	E		G06F-017/00	Based on patent EP 646881
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Abstract (Basic): EP 646881 A

The appts includes a memory (101) for storing a characteristic pattern for each of a number of **groups** and a discriminating function defining unit (102) for selecting at **random** every combination of two **groups** of the **groups** stored in memory. For each selected combination of **groups** a two-**group** linear discriminant function is **defined** which provides an optimum **borderline** bisecting the combination of two **groups**. A two-**group** discriminating result is **calculated** (103) to which a given **sample** is attributed for every combination of the two **groups** using the two-**group** linear discriminant function.

A support degree determining part (104) determines a support degree of the two-**group** discrimination result for every combination of the two **groups**. An attribution degree **calculation** unit (105) **calculates** attribution degree indicating to what extent the test data is attributed to each of the **groups** based upon the two-**group** discriminating result and support degree for every combination of the two **groups**.

USE/ADVANTAGE - **Statistically** assisting diagnosis of disease and to which of multiple disease **group** diseased patient belongs. Enables accurate identification of probability of disease **group** which conforms to acquired knowledge to assist medical practitioners knowledge and experience.

Dwg.1/10

Title Terms: MEDICAL; DIAGNOSE; ASSIST; APPARATUS; DISCRIMINATE; DEGREE;

DETERMINE; MULTIPLE; DISEASE; **GROUP** ; TEST; DATA; PATIENT; THROUGH;  
MULTIPLE; **GROUP** ; DISCRIMINATE; ANALYSE  
Derwent Class: P31; S05; T01  
International Patent Class (Main): A61B-005/00; G06F-007/08; G06F-015/18;  
G06F-015/42; G06F-017/00  
International Patent Class (Additional): G01N-033/50; G06F-019/00;  
G06F-159-00

9/5/23 (Item 23 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007906550 \*\*Image available\*\*  
WPI Acc No: 1989-171662/198923  
XRPX Acc No: N89-130879

Random variables statistical analyser - has output of division-by-two  
divider and interval of analysis boundary input to subtractor with  
output to comparator

Patent Assignee: UFA AVIATION INST (UFAV )  
Inventor: ALYPOV Y U E; FATIKOV S E  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1418754	A	19880823	SU 4180823	A	19870114	198923 B

Priority Applications (No Type Date): SU 4180823 A 19870114

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
SU 1418754	A	4		

Abstract (Basic): SU 1418754 A

The analyser contg. an order **statistic** unit, a **set** of order **statistic** units, two **sets** of AND-gates, a clock generator, two subtractors, an adder, a cumulative algebraic adder, a division-by -2 divider, a code to voltage converter, divider, moments **calculator**, decoder and indicator, has the output of the first subtractor connected to the comparator (18) and to a switch. Another comparator, third to the fifth subtractors, an OR-gate and another switch are also introduced. The input signal sequence is fed to the order **statistic** unit which is a controlled memory. The type of distribution is selected according to the aperture.

USE/ADVANTAGE - In computer engineering as a **statistical** analyser for determ. of the distribution laws of **random** variables, accuracy is increased by redistribution of an elementary density function in the case when an aperture covers a **boundary** of an interval of analysis.

Bul.31/23.08.88 (4pp Dwg.No.1/1)

Title Terms: **RANDOM** ; VARIABLE; **STATISTICAL** ; ANALYSE; OUTPUT; DIVIDE;  
TWO; DIVIDE; INTERVAL; ANALYSE; **BOUNDARY** ; INPUT; SUBTRACT; OUTPUT;  
COMPARATOR

Derwent Class: T01

International Patent Class (Additional): G06F-015/36

File Segment: EPI

9/5/25 (Item 25 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004154132

WPI Acc No: 1984-299671/198448

XRFX Acc No: N84-223371

Random **number distribution parameter** calculator - has square root  
calculator **connected to subtractors, dividers, dispersion** calculator  
**and mathematical expectation** calculator

Patent Assignee: MALEVINSKII M F (MALE-I)

Inventor: MSLEVINSKI M F; PLETENKIN A V; PRIZHILOV V V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1084811	A	19840407	SU 3299978	A	19810612	198448 B

Priority Applications (No Type Date): SU 3299978 A 19810612

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 1084811	A		8		

Abstract (Basic): SU 1084811 A

Modified unit has divider (6), counter (16),  
multipliers (18,24,42), comparators (14,27), shift register (35),  
recording unit (3) AND-gate (17), mathematical expectations computer  
(5) trigger (40) exponential function generator (21), distribution  
**calculator** (4) root function generator (41), delay lines (22,23)  
subtractors (29,30), memory (25), and pulse oscillator (7), as new  
parts.

A **statistical** analyser is used to **calculate** the **random**  
quantity X's mathematical expectation value, Bar X, according to the  
equation:  $\bar{X} = 1/n(\text{sum of } X_i)$  within the **limits**  $i=1$  and  $i=n$ , an  
interval within which lies the true value X of the maths. expectation  
value.

Modified unit enables adaptive adjustment to **calculate** the value  
for any **random** quantity with normal distribution with any affore  
given accuracy and within a given number of min. selections, by  
progressive **calculations** with **set limits** and comparing the  
results of the **calculations**.

USE/ADVANTAGE - Used as a special computer in automated control  
systems with **statistical** data processors. Its algorithm can be used  
to **calculate** by adaptive adjustments, the mathematical expectations  
of any **random** value. Bul.13/7.4.84 (8pp Dwg.No.1/1)

Title Terms: **RANDOM** ; **NUMBER**; **DISTRIBUTE**; **PARAMETER**; **CALCULATE** ; **SQUARE**;  
**ROOT**; **CALCULATE** ; **CONNECT**; **SUBTRACT**; **DIVIDE**; **DISPERSE**; **CALCULATE** ;  
**MATHEMATICAL**; **EXPECTANCY**; **CALCULATE**

Derwent Class: T01

International Patent Class (Additional): G06F-015/36

File Segment: EPI

9/5/26 (Item 26 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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004024332

WPI Acc No: 1984-169874/198427

XRPX Acc No: N84-126538

**Data-processing probability correlometer - has sample boundary  
setter connected to mode calculator to calculate mode and  
co-variance function**

Patent Assignee: KORCHAGIN V G (KORC-I)

Inventor: KRAVTSOV L Y A; MARTYNENKO A S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 1049921	A	19831023	SU 3356483	A	19811125	198427 B

Priority Applications (No Type Date): SU 3356483 A 19811125

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 1049921	A		12		

Abstract (Basic): SU 1049921 A

Correlometer contg. an adder (3), **random** number generator (4), cumulative register (5), memory (6) and multiplier (7) has performance improved as computing and electromeasuring technique, esp. in determin. of characteristics of **random** behaviour. It can be used for static processing of data in hydrometeorology biology, automation and other areas to calculate the histogram and mode of a **statistical** distribution.

Introduction of a mode **calculator** (9) and **sample boundary setter** (10) provides for simultaneous **calculation** of the mode and covariance function. Initial essential information is entered in a normaliser (1) and synch (2) to **define** characteristics and states of the investigated **random** process.

To evaluate the covariance function, N ordinates of the investigated process are fed to the first input of the normaliser. Each ordinate is processed similarly cyclically. To **calculate** the mode of the **random** process, a series approximation formula is used. In the first interval the information of a frequency count is transferred to a number register (8) in response to a signal from the control circuit (2). The content of the number register is then compared with the content of a result register (11) initially at zero. Bul.39/23.10.83.

(12pp Dwg.No.1/5

Title Terms: DATA; PROCESS; PROBABILITY; CORRELOMETER; **SAMPLE ; BOUNDARY ; SET ; CONNECT ; MODE ; CALCULATE ; CALCULATE ; MODE ; CO ; VARIANCE ; FUNCTION**

Derwent Class: T01

International Patent Class (Additional): G06F-015/33

File Segment: EPI

9/5/31 (Item 31 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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002090190

WPI Acc No: 1979-B0078B/197905

**Computer engineering random quantity statistical analyser - uses  
deviation analysis and arbitrary scaling for correct handling of any  
interval without data loss**

Patent Assignee: MARGELOV A V (MARG-I)

Inventor: SUVOROVA N V; VETER V V

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 596957	A	19780225				197905 B

Priority Applications (No Type Date): SU 2193510 A 19751127

Abstract (Basic): SU 596957 A

Analyser is **described** for testing a **random** quantity, in a form converted into parallel binary code with any number of digits. The object is to construct an electrical histogram of the changing quantity without the risk of loss of information of the initial code has to be widened.

The incoming stream of parallel binary code enters the device at a unit assigning the initial code, based on the first three codes arriving; and also an adder, where the deviation of an input from its previous value is determined. The distribution of the **random** quantity is analysed, decoded and registered by counter and indicator, with the advantage that input information is not lost if the scaling has to be adjusted to cater for wide deviations.

Initial code **sette** (1) and adder (2) receive input code, the latter detecting deviations and passing them through divider (3) under the control of deviation analyser (4) and controlle (5). Decoder (6), counter (7) and indicator (8) complete the array.

Depending on the intervals chosen for the process, deviations fall within **limits** or not. If not, analyser (4) establishes one of two reasons: either the initial code needs altering in one direction, or the deviation is not commensurate with intervals and a dividing factor has to be introduced at unit (3), which can be a shift register.

Title Terms: COMPUTER; ENGINEERING; **RANDOM** ; QUANTITY; **STATISTICAL** ;  
ANALYSE; DEVIATE; ANALYSE; ARBITRARY; SCALE; CORRECT; HANDLE; INTERVAL;  
DATA; LOSS

Derwent Class: T01

International Patent Class (Additional): G06F-015/36

File Segment: EPI

9/5/32 (Item 32 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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001673528

WPI Acc No: 1977-A9993Y/197705

Statistical analyzer with adder and checking unit - provides efficient  
means of random number probability distribution sample checking

Patent Assignee: MOSC RAIL TRANSPT (MORA-R)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 515114	A	19760608				197705 B

Priority Applications (No Type Date): SU 2097146 A 19750116

Abstract (Basic): SU 515114 A

Statistical analyzer is designed for use in computing systems, as a device for statistical processing of experimental data. It consists of an analog-to-digital converter 1, a random number probability distribution evaluating unit 2, memory 3 clo ic unit 6 and a control unit 7, and contains additionally adder 4 and checking unit 5, both of which consists of two-input coincidence-type calculators and zero detectors.

The function of the new elements is to receive information about the characteristics of distribution, normalize it and produce an output signal, to indicate that the checked number falls within the tolerance zone, or is outside its limits.

Title Terms: STATISTICAL ; ADDER; CHECK; UNIT; EFFICIENCY; RANDOM ;  
NUMBER; PROBABILITY; DISTRIBUTE; SAMPLE ; CHECK

Derwent Class: T01

International Patent Class (Additional): G06F-015/36

File Segment: EPI